

10/659,423 filed 09/10/2003
Tammy Burd-Mehta
Reply to Office Action of December 05, 2005

REMARKS/ARGUMENTS

Claims 1 and 3–10 are pending in the above-captioned application, and all of these claims stand rejected.

I. Claim rejections under 35 U.S.C. § 103(a) as being unpatentable over Stapleton (US 5,188,963) in view of Moreira (“Efficient removal of PCR inhibitors using agarose-embedded DNA preparations”)

Claims 1, 3–7, and 10 were rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Stapleton (US 5,188,963) in view of Moreira (“Efficient removal of PCR inhibitors using agarose-embedded DNA preparations,” Nucleic Acids Research. 1998. Vol. 26, No. 13: Pages 3309–3310). This rejection is respectfully traversed. To warrant rejection under 35 U.S.C. § 103(a), all the claim limitations must be taught or suggested by the prior art. See MPEP § 2142.

With regard to amended claim 1, at a minimum, the combination of Stapleton and Moreira does not teach a PCR sieving medium comprising a polymer solution, “which polymer solution comprises less than about 0.4% polymer.” While both Stapleton and Moreira teach performing PCR in a gel, only Stapleton teaches performing PCR and electrophoresis in the same gel. Stapleton does not specify a polymer concentration. The Examiner has cited Moreira for Applicant’s limitation of the sieving medium comprising “less than about 0.4% polymer.”

In fact, the sieving medium of Moreira is a 1.2% agarose gel as stated on page 3310, at the end of the second full paragraph. The agarose blocks of Moreira containing agarose concentrations “even as high as 0.3%” are used in sample preparation to isolate large DNA’s from cell debris and contaminants, resulting in a purified gDNA. See page 3309, the paragraph beginning at the bottom of column 1. These gel blocks are then cut with a surgical blade into 5-μl fragments and added to a PCR mixture. Following thermocycling, the products are “electrophoresed on 1.2% agarose gels.” See page 3310, the second full paragraph. As a result, Moreira teaches away from performing both PCR and electrophoresis in a PCR sieving medium having “less than about 0.4% polymer.”

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Thus, combining the two cited references does not teach or suggest all of the limitations of claim 1. Withdrawal of the rejection of claim 1 under 35 U.S.C. § 103(a) as being unpatentable over Stapleton (US 5,188,963) in view of Moreira ("Efficient removal of PCR inhibitors using agarose-embedded DNA preparations") is respectfully requested.

Claims 3-7 and 10 depend directly or indirectly from claim 1. Any claim depending from a nonobvious claim is also nonobvious. See MPEP § 2143.03 and *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988). Therefore, dependent claims 3-7 and 10 are nonobvious. Withdrawal of the rejections of these claims as being unpatentable over Stapleton in view of Moreira is also respectfully requested.

II. Claim rejections under 35 U.S.C. § 103(a) as being unpatentable over Stapleton (US 5,188,963) in view of Moreira ("Efficient removal of PCR inhibitors ...") and further in view of Woolley et al. ("Ultra-high-speed DNA fragment separations using microfabricated capillary array electrophoresis chips")

Claims 8 and 9 were rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Stapleton (US 5,188,963) in view of Moreira ("Efficient removal of PCR inhibitors using agarose-embedded DNA preparations") and further in view of Woolley et al. ("Ultra-high-speed DNA fragment separations using microfabricated capillary array electrophoresis chips," Proc. Natl. Acad. Sci. November 1994. Vol. 91: Pages 11348-11352). This rejection is respectfully traversed.

As demonstrated above, Applicants' claim 1 is nonobvious. Claims 8 and 9 depend directly and indirectly, respectively, from claim 1. As any claim depending from a nonobvious claim is also nonobvious, dependent claims 8 and 9 are nonobvious. Withdrawal of the rejection of claims 8 and 9 under 35 U.S.C. § 103(a) as being unpatentable over Stapleton in view of Moreira and further in view of Woolley et al. is, therefore, respectfully requested.

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Conclusion

For the foregoing reasons, Applicant believes all the pending claims are in condition for allowance and should be passed to issue. If the Examiner feels that a telephone conference would in any way expedite the prosecution of the application, please do not hesitate to call the undersigned attorney.

Respectfully submitted,

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Signed: Ann C. Petersen